

© 2019 International Journal of Nursing and Midwifery Science (IJNMS)

This is an Open Access article distributed under the terms of the [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

<http://ijnms.net/index.php/ijnms>

ORIGINAL RESEARCH

e-ISSN : 2686-2123

p-ISSN : 2686-0538



THE ANALYSIS PREDICTOR OF LANGUAGE DEVELOPMENT ACHIEVEMENT IN UNDER FIVE-YEAR-OLD CHILDREN

Tri Ratnaningsih¹, Moh Alimansur², Ifa Roifah³

Stikes Bina Sehat PPNI Mojokerto

Email: triratna868@gmail.com

ABSTRACT	Keywords
<p>The difficulty of working mothers in stimulating the development of children's language was the lack of quality time for stimulation, the child was given a "leftover" time by the mother after the mother worked and the condition was tired after work. The study aimed to look for the predictor of language development achievement in under five years old children. The study design was analytic correlation. The study population was under five years old children with their mother (employed and unemployed) in Mojokerto District as many as 760 respondents. Sample of 250 respondents were taken using cluster random sampling. Sources of data used primary data, the instrument used a questionnaire and Denver Development Screening Test (DDST), and collection of Denver Development Screening Test (DDST) data through observation. This research used logistic regression test. The Research result showed that mother's job influenced children language development with the analysis result p-value $0,000 < 0,05$, while the children's gender also influenced their language development with p-value $0,048 < 0,05$. From this research, it could be known that the working mothers had less time to motivate their children to learn a good language. Female children had a better language development than the male ones because female children had less activities.</p>	<p>Predictor, Language development, children</p>

PREFACE

Language for the ability to communicate with others. In this sense all ways to speak are included, where thoughts and feelings are expressed in the form of symbols to express oral, written, gesture, numbers, paintings and facial expressions, while speaking is a tool to provide and convey a sense of desire and need (Setyowati, 2012). Preschool age is a very important and very decisive period, because this future will determine the child's development in the next day. Fragile or weak development of children in preschool times can lead to be weak development of children in the next period. Conversely, if at the preschool age the child experiences a good development process, the child will grow to be the expected child. Language is one of the potentials that must be developed in preschoolers because with good language ability, children can not only develop in the academic field but children are also able to interact well in their social environment (RI, 2014).

Working or not working after giving birth is a common dilemma faced by working mothers. Today most mothers choose to return to work after giving birth, even though realizing that to work again means having to hire caregivers to care for children while working. Reasons for working for women who are married because they have to help their husbandsto ease the economic burden of their families that is increasingly difficult, another reason because they feel they need to anticipate the worst, for example, if husbands are excluded from work, forced to be single parent due to divorce, etc. It cannot be denied that economic problems occupy the first position as the biggest source of problems in household life (Adhi, 2010). The difficult part of working in stimulating the development of

children's language is the lack of quality time to do stimulation, children are given "leftovers" time by mothers after working and in the condition of tired mothers after work causing ineffective stimulation of language development which is likely to have an impact children's language.

The delay in talking to children more and more days seems to increase rapidly. Some reports stated the incidence of speech and language disorders ranges from 2.3% -24.6%. Data in Indonesia, stated the prevalence of delays in talking to children is between 5% -10% in school children (Suparno, 2010). Research from Suparmiati, about the relationship of working mothers with late talk to children, concluded that there was no relationship between mothers working with delays in talking to children, with OR 1.93 (IK95%; 0.81-4.58; $p = 0.13$) Whereas other factors, which were tested only the factor of family history was late in speaki(RI, 2014)ng, the results were significant with an OR value of 7.81 (95% CI 1,636 - 37,36; $p = 0,04$).

Child language development is influenced by internal factors which is the child and external factors from the environment. Internal factors, including the condition from birth including organ physiology that is seen, which is gender, while external factors include mother's age, mother's education, mother's work, mother's knowledge, attitudes, social economy, learning facilities, intelligence, health and family relations (Setyowati, 2012). The impact of the working mother on the child depends on the time and energy provided by the mother for her children after working, and how well the mother knows the whereabouts of her child while working and the mother becomes a role model for her child. Mothers who work outside the house must be smart in managing time

for the family, because a mother has the main task of managing household affairs including supervising and guiding children. If the mother has a child who is still small, a mother must be able to manage her time wisely. Thus, the role of a mother is important to see how far the child's development when the mother is outside the house. Working mothers provide less time for their children compared to mothers who do not work. The continuous absence of the mother in the midst of her child causes the child to get cognitive and emotional attention. The absence of this mother is perceived by the child as a rejection of the child. Working mothers have a negative impact on children's development, but the negative impact can be corrected or neutralized by the intensity or quality of the time and relationship between mother and child. Although the intensity of time between mother and child is few and not frequent, but if it has quality, the behavior of children who are naughty and deviant can be prevented (Nursalam, 2005). This greatly affects the development of children's language, the level of children's language development is below the level of language development whose age is the same then the child's social relations are late. This will affect the social adjustment and personality of the child. The most serious influence is on the ability to spell and read as the beginning of a career so that it can hamper children's achievements in the future (Yuniarti, 2015).

To develop language ability, it is necessary to give children the opportunity to talk to each other, but usually in short and not intact sentences. Children also need stimuli such as listening to short stories, browsing picture books and listening to simple songs. Apart from that, teachers are also required to always give children the opportunity to ask questions, discuss and

explore various things that are of interest to children. Let the children be trained early to speak well, which is by training children to ask questions, express their thoughts, and hopefully children are not silent but active in various activities (Paul & Jennings, 1992). from several studies in Indonesia found early childhood language development can be improved with family support (Safitri, 2017).

Based on the background above, the researcher was interested in knowing the differences in the language ability of preschoolers in working and non-working mothers in Mojokerto District.

MATERIAL AND METHODS

This study was a correlation analytic, one of the quantitative analysis techniques used to test hypotheses about whether there is a relationship or not between variables or samples studied. If there was a relationship, is the relationship significant or just by chance (Setiadi, 2013). This study used that design because the researchers wanted to know the predictor of language development achievement in under five years old children in Mojokerto. The population in this study were 760 under five years old children in Mojokerto with working and non-working mothers, samples in this study were under-fives in Mojokerto as many as 250 children. The sampling technique was cluster random sampling. The independent variables in this study were maternal employment status, number of children, education and maternal age while the dependent variable in this study was the achievement of development of children. Data collection in this study used primary data through observation using Denver Development Scoring Test (DDST) and interviews. The research methodology used logistic regression method (Nursalam, 2013).

RESULT

1. Simultaneous Significant Test

Table 1 The simultaneous test result of language development achievement predictor on under five years old children in Mojokerto

Variable	Chi-square	df	Sig
Age, education, parity, mother's job status, and children's gender language development	11,018	1	0,000

The model test result showed the value of chi-square 11,018 and *p-value* $0,000 < 0,05$. The result analysis could be concluded that all the variable which were age, education, parity, mother's job status, and children's gender influenced the language development achievement on under five years old children.

2. The predictor of language development achievement in under-fives

Table 2 The test result of partial predictor of language development achievement predictor on under five years old children

Variable	df	Sig	Alpha
Age → language development	1	0,665	0,05
Education → language development	1	0,948	0,05
Parity → language development	1	0,315	0,05
Job status → language development	1	0,004	0,05
Children's gender → language development	1	0,048	0,05

The partial significance test result was as follows:

- The test results of the influence of maternal age on the achievement of language development in children were obtained, *p-value* $0.665 > 0.05$ meant that partially the age variable of the mother did not affect the achievement of language development in children
- Test results of the influence of maternal education on the achievement of language development in under five years old children *p-value* $0.948 > 0.05$ meant that partially maternal education variable did not affect the achievement of language development in children
- The test results of the influence of parity on the achievement of language development in children obtained *p-value* $0.315 > 0.05$ meant that partially the variable of parity was not influential on achieving language development in children
- The test results of the influence of the mother's job status on the achievement of language development in children obtained *p-value* $0,004 < 0,05$ meant that partially the variable of employment status of the mother affected the achievement of language development in children
- The test results of the influence of the gender of children on the achievement of language development in under-fives obtained *p-value* $0.048 < 0.05$, which meant that partially the gender variable of children affected the achievement of language development.

DISCUSSION

1. The influence of age, education, parity, employment status of children, and gender of children on language development achievement of under five years old children

Based on table 1, it showed that the results of the model test obtained chi-square value 11.018 and p-value 0,000 <0.05. The results of the analysis could conclude that the variables of age, education, parity, maternal employment status and gender of children were compared with language development in children. Mothers with age above 25 years would be more mature in parenting the language of children under five, because with the increasing age, a person would be more mature in the mindset and application of children's language development. Mother's education also supported the development of language, because the higher education of a person would also need language development. The more than one parity could develop children's language because mothers were more advanced in their first child. Mothers who did not work had more time in helping children, so time could be used to do language guidance for children. Working mothers provided less time for children compared to mothers who did not work. The absence of mothers who worked caused children to get less emotional attention. The absence of this mother is perceived by. Working mothers had a negative impact on children's development, but negative thinking could improve or be neutralized by the intensity or quality of time and the relationship between mother and child. Because the difficulties of time between mother and child were few and not rare but of high quality, the problem of children who were naughty and denying could be prevented (Hidayat, 2009).

Workers or unable to work found a common dilemma for working mothers. Today's mothers were more likely to go back to work after giving birth, while rethinking work meant having to improve the workforce to care for children while working. Reasons for working for women who were married because they had to help their husbands alleviate the difficult of family burden, the consequences of divorce, etc. It was undeniable that economic problems was in the first position as the biggest source of problems in life (Adhi, 2010).

Language development of female children were better than the male ones, this was due to fewer female children's activities so that the free time would be used to learn and talk with mother (Leonard, 1991). Infancy is the most important period for the development of the baby's brain because the brain's nerve cells experienced extraordinary development. Over time, this growth showed differences according to sex. One of the differences arises in differences in language skills. Overall, the brain of a newborn weighed 8 percent of the total body. When mature, the weight becomes 2 percent of the total body. But at the end of its development, the male brain has a size of 8-10 percent larger than the female brain. Even so, the female brain also develops faster than the male brain. The size of a woman's brain has peaked at the age of 10.5 years. In men, brain development reaches peak at the age of 14.5 years. The length of development is what might make the male brain become a little bigger. Male and female brain growth also has different characteristics (Rescorla & Goossens, 1992).

The male brain develops more in visualization abilities, while women are more likely to be fussy because they have 2 sources of speech in the left and right brain, the male brain has only one

part to process the language located in the left brain. Whereas in women, both the left and right brain are both processing language. That is what makes girls tend to be verbally active compared to men since they were around 10 years old. Lose in the field of language, men have advantages in the field of imagination and visualization. As a result, men are better at processing visual information and imagining 3-dimensional shapes (Paul & Jennings, 1992). Men also have superior navigation or mapping capabilities. The brain has been genetically programmed to develop neatly, regularly and gradually according to the chronological age. Each area in the brain has its own growth curve and is interconnected. This development is closely related to intellectual development. Although the male brain is bigger, it does not mean that men are smarter. At present, there are more women who succeed in higher education and academic success than men. it is suspected that this is more influenced by environmental factors and nutrition (Snyder & Scherer, 2004).

2. The predictor of language development achievement in under five years old children.

In table 2 showed that the mother's work significantly affected the language development of the child, the results of p-value $0,000 < 0,05$ meant that partially the variable of employment status of the mother affected the achievement of language development in children. According to Piaget, children learn the language of speech just as if learning other knowledge, which is forming and constructing language. Children form the rules of language and experience. By using the wrong language, then justified by their parents, a child builds his ability to speak. With these experiences, the

construction of children becomes better. This process occurs at the age of 2 to 4 years (Suparno, 2010). The development of children's language can be identified based on the results of a questionnaire in which almost all respondents (97.1%) passed the test, namely knowing the usefulness of 2 objects (questionnaire number 1), counting 1 cube (questionnaire number 5) and mentioning 1 color (questionnaire number 3). In addition, almost all respondents (94.1%) passed the 2 adjective understanding test (questionnaire number 2) and knew 2 activities (questionnaire number 1). Although almost all respondents passed the test in the number above, it is important to know that the questionnaire was indeed for children aged 3-4 years so that the child naturally passed the test. However, there is 1 child in the doubtful category because the child does not answer the test, but according to the parents, the child is actually capable. Whereas 1 failed the test because it did not want or refused to be tested (Rescorla & Goossens, 1992).

The mothers who did not work stated that they did dedicate their time to care for their children to a certain age when they worked. They spend 24 hours with children inside and outside the house so that the bond with the child looks very strong. Whereas there are mothers who do not work but their child's language development is late (1 child) because the mother is less able to care for the child because the mother is still young and only thinks of her appearance so the child rarely gets stimulation from the mother (Hoff & Tian, 2005).

In table 2 showed that gender affected the development of children's language, the results obtained p-value $0.048 < 0.05$ meant that the gender

variable partially affected the child's achievement of language development. Research showed that boys and girls absorbed language differently. Most studies showed that girls were a little more advanced than boys at the early stages of speech and language development. Girls tend to speak brighter and clearer than boys, and girls tend to use more nouns, name games, play roles, and abstract sounds. Girls outnumber boys in all major language categories, including number of words produced, number of words understood, number of words used in combination, complexity of sentences, and maximum sentence length. But their development tends to be more advanced only one or two months than boys. However, small differences between these gender have never caused a concern. If you are worried that your son might have a problem, boys tend to put more pressure on earlier actions, and they master other parts and talk later. Many have great talents in making various sound effects. When boys and girls grow bigger, the differences in how they use language become more visible. Girls tend to like talking to dolls and play roles with dolls and similar toys. Boys tend to like game-oriented activities that have rules about winners, losers, and details. Boys sometimes use talk to tell stories and jokes and interrupt and challenge each other. On the other hand, girls tend to be involved in various activities that do not have winners and losers. They tend to emphasize turn issues and share their thoughts and feelings.

Research shows that the way parents interact with their children influences language development. Various studies show that mothers tend to use longer and more complicated sentences for their daughters than for their sons. Mothers also tend to talk to their daughters about abstract concepts

such as feelings and emotions (Leonard, 1991)

CONCLUSION

Based on the research, it could be concluded that:

1. Mother's job influenced the achievement of language development of under five years old children with $p\text{-value } 0,000 < 0,05$
2. Children's gender influenced the achievement of language development of under five years old children with $p\text{-value } 0,048 < 0,05$

SUGGESTIONS

1. For Parents
For parents who work, they must be very clever in managing the time to stimulate development in children, in addition mothers must add information in caring for children both through pediatricians and group discussions on social media. For parents who do not work have plenty of time to stimulate their children so that children are closer to their mothers.
2. For The Next Researcher
The results of this study can still be further investigated about the factors that influence children's language development beside occupational factors, it can be factors of children's health status, as well as maternal characteristics.
3. For Health Workers
Health workers must work to provide information to mothers, especially through children's school, on how to stimulate children's language development according to their age.

REFERENCE

- Adhi. (2010). *No Title Perbedaan Perkembangan Anak Balita Pada Ibu Bekerja Dan Ibu Tidak Bekerja Penilaian Menggunakan Metode Denver II*. universitas sebelas maret surakarta.
- Hidayat, A. . (2009). *Pengantar Ilmu Kesehatan Anak untuk Pendidikan Kebidanan*. (S. Medika, Ed.). Jakarta: Salemba Medika.
- Hoff, E., & Tian, C. (2005). Socioeconomic status and cultural influences on language. *Journal of Communication Disorders*, 38(4), 271–278.
- Leonard, L. B. (1991). Specific language impairment as a clinical category. *Language, Speech, and Hearing Services in Schools*, 22(2), 66–68.
- Nursalam. (2005). *Asuhan Keperawatan Bayi Dan Anak (Untuk Perawat Dan Bidan) Edisi*. Jakarta: PT Salemba Medika.
- Nursalam. (2013). *Konsep Penerapan Metode Penelitian Ilmu Keperawatan*. jakarta: Salemba Medika.
- Paul, R., & Jennings, P. (1992). Phonological behavior in toddlers with slow expressive language development. *Journal of Speech, Language, and Hearing Research*, 35(1), 99–107.
- Rescorla, L., & Goossens, M. (1992). Symbolic play development in toddlers with expressive specific language impairment (SLI-E). *Journal of Speech, Language, and Hearing Research*, 35(6), 1290–1302.
- RI, D. (2014). *Pemantauan Pertumbuhan, Perkembangan, Dan Gangguan Tumbuh Kembang Anak*. PMK No. 66 ttg Pemantauan Tumbuh Kembang Anak Title. Jakarta.
- Safitri, Y. (2017). Faktor-faktor yang berhubungan dengan Perkembangan bahasa balita di UPTD kesehatan Baserah Tahun 2016. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 1(2), 148–155.
- Setiadi. (2013). *Konsep dan Penulisan Riset Keperawatan*. Yogyakarta: Graha Ilmu.
- Setyowati, E. (2012). *Meningkatkan Kecerdasan Interpersonal Melalui Metode Sosiodrama pada Anak Kelompok B TK Pertiwi Brangkal I Wedi Klaten Tahun Pelajaran 2011/2012*. (FKM UNS, Ed.). Surakarta: FKM UNS.
- Snyder, L. E., & Scherer, N. (2004). The development of symbolic play and language in toddlers with cleft palate. *American Journal of Speech-Language Pathology*.
- Suparno. (2010). *Pendidikan Inklusif untuk Anak Usia Dini*. *Jurnal Pendidikan Khusus Vol. 7. No. 2*. Yogyakarta: Universitas Negeri Yogyakarta.
- Yuniarti. (2015). *Asuhan Tumbuh Kembang Neonatus Bayi – Balita Dan Anak Prasekolah*. Bandung: Rafika aditama.